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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,484

10/25/2006

Johannes Petrus Zijp

1328-29

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04/02/2008

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EXAMINER

NGUYEN, KHANH TUAN

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

04/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/574,484	Applicant(s) ZIJP ET AL.	
	Examiner KHANH T. NGUYEN	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) 15-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 20-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/03/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/05/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's election with traverse of Group I, claims 1-14 and 20-24, in the reply filed on 02/13/2008 is acknowledged. The traversal is on the grounds(s) that the subject matter of both Group I (claims 1-14 and 20-24) and Group II (claims 15-19) concern the same invention. This is not found persuasive because the invention of Group I having a coating of good electrical conductivity and an optimal surface morphology as described in the specification (Page 2, lines 9-14) whereas the invention of Group II having two dominant crystalline orientations of tin oxide to optimal light capture. Claims 1-14 and 20-24 are currently pending in the instant application. Claim 15-19 are withdrawn from further consideration. The requirement is still deemed proper and is therefore made FINAL.

Priority

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The Applicant benefits the priority date filed on 10/02/2003.

Information Disclosure Statement

3. The information disclosure statement (IDS) filed on 12/05/2006 has been considered. An initialed copy accompanies this Office Action.

Drawings

4. The drawing(s) filed on 04/03/2006 has been considered.

Claim Objections

Claim 2 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The instant claim recites a film (coating) has been applied to the substrate which failed to further limit the subject matter of a previous claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-14 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strickler et al. (U.S. Pat. 6,858,306 B1 hereinafter, "Strickler").

Strickler teaches a coated article and a method of forming the coated article comprising a glass substrate 36, a first coating 41 of antimony doped tin oxide deposited onto the glass substrate 36 and a second coating 42 of fluorine doped tin oxide deposited onto the surface of the first coating 41 of antimony doped tin oxide

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(Abstract and Fig. 2). Strickler further teaches the first coating 41 of antimony doped tin oxide having a thickness of about 1400 to 2000 Angstroms (Col. 3, lines 64-67), which is equivalence to about 140 to 200 nm. The second coating 42 of fluorine doped tin oxide having a thickness of about 2200 to 3500 Angstroms (Col. 4, lines 19-24), which is equivalence to about 220-350 nm. The combined thickness of the first and second coating is expected to range from about 360-550 nm. Strickler also teaches the first coating 41 of antimony doped tin oxide containing a molar ratio of antimony to tin between about 0.05 and 0.12 (Col. 3, lines 61-62) that is about 0.05 and 0.12 mole percent (i.e. atomic percent) of antimony per mole of tin. Strickler teaches the first coating and second coatings may both include fluorine doped tin oxide (Col. 7, lines 16-19 and Col. 7, lines 49-52). Strickler also teaches the multilayered coatings of the coated glass exhibit neutral color in both reflectance and transmittance, however the color is defined by the composition and thickness of the various layers of the stack (Col. 5, lines 11-12).

Although Strickler is silent with regards to the amount of dopant (i.e. electron donor) in the second coating.

It is within the expected skills of one having ordinary skill in the art at the time the invention was made to optimize the color of the coated glass by varying the composition of the layers, as suggest by Strickler (Col. 5, lines 11-12), specifically formulating the first fluorine doped tin oxide coating comprises of 0.12 mole of fluorine per mole of tin oxide (upper limit of dopant range) and the second fluorine doped tin oxide coating comprises of 0.05 mole of fluorine per mole of tin oxide (lower limit of dopant range) and

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applying the multilayers to a glass substrate because such a composition comprising a multilayers of fluorine doped tin oxide coatings deposited onto a substrate is suggested by Strickler and therefore the composition is obvious.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHANH T. NGUYEN whose telephone number is (571)272-8082. The examiner can normally be reached on Monday-Friday 8:00-5:00 EST PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Kopec/
Primary Examiner, Art Unit 1796

/KTN/
03/13/2008